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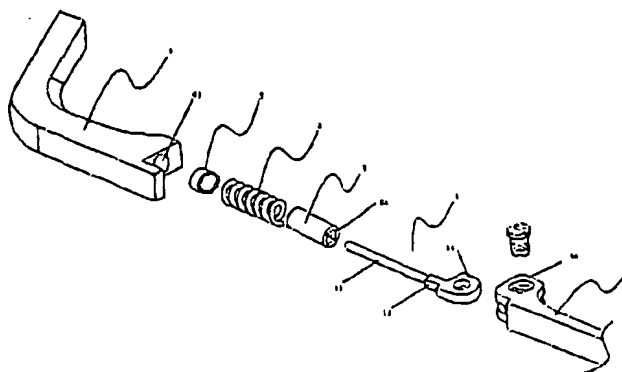
(84) 指定国(除另有指明, 要求每一种可提供的地区保护): ARIPO(BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), 欧亚专利(AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), 欧洲专利(AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

本国际公布:
— 包括国际检索报告。

所引用双字母代码和其它缩写符号, 请参考刊登在每期 PCT公报期刊起始的“代码及缩写符号简要说明”。

(54) Title: ELASTIC HINGE OF THE SPECTACLE FRAME AND MANUFACTURING METHOD THEREOF

(54) 发明名称: 眼镜架弹性铰链及其制造方法



(57) Abstract: The invention relates to an elastic hinge of the spectacle frame and a manufacturing method thereof. The elastic hinge at least comprises an axle that is in turn sleeved by a locating block, an elastic means and a limit stop. The elastic force of the elastic hinge between the spectacle frame can be opened and closed easily with respect to the spectacle leg and the locating block ensures the stability of the movement above. The manufacturing method thereof at least includes the steps as follow: fabricating the basic form of the axle from metallic sheet material; pursing up the rear end of the axle into a cylinder with an appropriate diameter; processing the forside of the axle to obtain a hole of the hinge. The surface of the processed axle has no vestige of the die stamping and has a high fineness. And the surface of the axle after processing has a homogeneous density of the metallic molecule and has no stress concentration, which adds the rigidity of the axle and insures the stability. The length of the axle can be controlled as desired.

【国统布】

WO 2005/024495 A1

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2004/000071

A. CLASSIFICATION OF SUBJECT MATTER

IPC⁷:G02C 5/22

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC⁷:G02C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Chinese Patent Application Publications

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPODOC, WPI, PAJ, CNPAT: ELASTIC HINGE PIVOT AXIS PISTON

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CN.1165966A (EYETEC CO LTD) 26 Nov. 1997.	1-27
A	EP.0378969A1 (LN INDUSTRIES SA) 25 Jul 1990.	1-27
A	WO.0179917A (CHEVASSUS SA) 25 Oct. 2001.	1-27
A	FR.2725046A1 (LUNETTERIE JULLIEN SA HENRY) 29Mar. 1996.	1-27

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim (S) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>		<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>
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Date of the actual completion of the international search 07 Jun 2004 (07.06. 2004)	Date of mailing of the international search report 24 - JUN-2004 (24 - 06 - 2004)
Name and mailing address of the ISA/CN 6 Xitucheng Rd., Jimen Bridge, Haidian District, 100088 Beijing, China Facsimile No. 86-10-62019451	Authorized officer Telephone No. (86-10)62085823

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/CN03/00972

Patent document Cited in search report	Publication date	Patent family member(s)	Publication date
CN.1165966A	26 Nov. 1997	EP.0807843 A	19 Nov 1997
		CA.2203217A	13 Nov 1997
		JP.9304741A	28 Nov 1997
		US.5760869A	02 Jun 1998
		KR.217496B	01 Sep 1999
EP.0378969A1	25 Jul. 1990	JP.2264214	29 Oct 1990
		CH.678364A	30 Aug 1991
		AT.103081T	15 Apr 1994
		DE.68913948D	21 Apr 1994
WO.0179917A	25 Oct. 2001	EP.1146381A	17 Oct 2001
		AU.4447401A	30 Oct 2001
		EP.1272891A	08 Jan 2003
FR.2725046A1	29 Mar. 1996	None	